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#30/jhu  
09-19-01  
1752



~~SEARCHED~~ ~~INDEXED~~  
**RAW SEQUENCE LISTING**

PATENT APPLICATION: US/08/403,803A

DATE: 07/20/2001  
TIME: 13:26:03

Input Set : A:\41426-A-PCT-US.txt

Output Set: N:\CRF3\07202001\H403803A.raw

**RECEIVED**

FEB 04 2002

~~TECH CENTER 1600/23M~~

3 <110> APPLICANT: Ron S. Israeli et al.  
5 <120> TITLE OF INVENTION: PROSTATE-SPECIFIC MEMBRANE ANTIGEN  
7 <130> FILE REFERENCE: 1769/41426-C/JPW/SHS  
-> 9 <140> CURRENT APPLICATION NUMBER: US/08/403,803A  
-> 9 <141> CURRENT FILING DATE: 1999-10-26  
9 <160> NUMBER OF SEQ ID NOS: 38  
11 <170> SOFTWARE: PatentIn version 3.0  
13 <210> SEQ ID NO: 1  
14 <211> LENGTH: 2653  
15 <212> TYPE: DNA  
16 <213> ORGANISM: human  
18 <400> SEQUENCE: 1

Does Not  
Corrected  
See Ad

Does Not Comply  
Corrected Diskette Needed  
see Add 1 & Add 2

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/08/403,803A

DATE: 07/20/2001  
TIME: 13:26:03

Input Set : A:\41426-A-PCT-US.txt  
Output Set: N:\CRF3\07202001\H403803A.raw

89	atttctatga	aacatccaca	ggaaatgaag	acatacagtg	tatcatttga	ttcaactttt	2160									
91	tctgcagtaa	agaattttac	agaaaattgt	tccaaagtca	gtgagagact	ccaggactft	2220									
93	gacaaaagca	acccaaatagt	attaagaatg	atgaatgatc	aactcatgtt	tctggaaaga	2280									
95	gcatttattt	atccatttagg	gttaccagac	aggccctttt	ataggcatgt	catctatgct	2340									
97	ccaaggcaggc	acaacaagta	tgcaggggag	tcattccag	gaatttatga	tgctctgttt	2400									
99	gatattgaaa	gcaaagtgg	cccttccaag	gcctggggag	aagtgaagag	acagatttat	2460									
101	gttgcagcct	tcacagtgc	ggcagctgca	gagacttga	gtgaagtgc	ctaagaggat	2520									
103	tcttagaga	atccgtattt	aatttgtgt	gtatgtca	cagaaagaat	cgtaatgggt	2580									
105	atattgataa	attttaaaat	tggtatattt	gaaataaaat	tgaatattat	atataaaaaa	2640									
107	aaaaaaaaaa	aaa					2653									
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112	<212>	TYPE:	PRT													
113	<213>	ORGANISM:	human													
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118	1			5			10									15
120	Arg	Pro	Arg	Trp	Leu	Cys	Ala	Gly	Ala	Leu	Val	Leu	Ala	Gly	Gly	Phe
121					20			25								30
123	Phe	Leu	Leu	Gly	Phe	Leu	Phe	Gly	Trp	Phe	Ile	Lys	Ser	Ser	Asn	Glu
124					35			40								45
126	Ala	Thr	Asn	Ile	Thr	Pro	Lys	His	Asn	Met	Lys	Ala	Phe	Leu	Asp	Glu
127					50			55								60
129	Leu	Lys	Ala	Glu	Asn	Ile	Lys	Lys	Phe	Leu	Tyr	Asn	Phe	Thr	Gln	Ile
130					65			70								80
132	Pro	His	Leu	Ala	Gly	Thr	Glu	Gln	Asn	Phe	Gln	Leu	Ala	Lys	Gln	Ile
133					85			90								95
135	Gln	Ser	Gln	Trp	Lys	Glu	Phe	Gly	Leu	Asp	Ser	Val	Glu	Leu	Ala	His
136					100			105								110
138	Tyr	Asp	Val	Leu	Leu	Ser	Tyr	Pro	Asn	Lys	Thr	His	Pro	Asn	Tyr	Ile
139					115			120								125
141	Ser	Ile	Ile	Asn	Glu	Asp	Gly	Asn	Glu	Ile	Phe	Asn	Thr	Ser	Leu	Phe
142					130			135								140
144	Glu	Pro	Pro	Pro	Pro	Gly	Tyr	Glu	Asn	Val	Ser	Asp	Ile	Val	Pro	Pro
145					145			150								155
147	Phe	Ser	Ala	Phe	Ser	Pro	Gln	Gly	Met	Pro	Glu	Gly	Asp	Leu	Val	Tyr
148					165			170								175
150	Val	Asn	Tyr	Ala	Arg	Thr	Glu	Asp	Phe	Phe	Lys	Leu	Glu	Arg	Asp	Met
151					180			185								190
153	Lys	Ile	Asn	Cys	Ser	Gly	Lys	Ile	Val	Ile	Ala	Arg	Tyr	Gly	Lys	Val
154					195			200								205
156	Phe	Arg	Gly	Asn	Lys	Val	Lys	Asn	Ala	Gln	Leu	Ala	Gly	Ala	Lys	Gly
157					210			215								220
159	Val	Ile	Leu	Tyr	Ser	Asp	Pro	Ala	Asp	Tyr	Phe	Ala	Pro	Gly	Val	Lys
160					225			230								235
162	Ser	Tyr	Pro	Asp	Gly	Trp	Asn	Leu	Pro	Gly	Gly	Gly	Val	Gln	Arg	Gly
163					245			250								255
165	Asn	Ile	Leu	Asn	Leu	Asn	Gly	Ala	Gly	Asp	Pro	Leu	Thr	Pro	Gly	Tyr
166					260			265								270

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TIME: 13:26:03

Input Set : A:\41426-A-PCT-US.txt  
Output Set: N:\CRF3\07202001\H403803A.raw

168 Pro Ala Asn Glu Tyr Ala Tyr Arg Arg Gly Ile Ala Glu Ala Val Gly  
169 275 280 285  
171 Leu Pro Ser Ile Pro Val His Pro Ile Gly Tyr Tyr Asp Ala Gln Lys  
172 290 295 300  
174 Leu Leu Glu Lys Met Gly Gly Ser Ala Pro Pro Asp Ser Ser Trp Arg  
175 305 310 315 320  
177 Gly Ser Leu Lys Val Pro Tyr Asn Val Gly Pro Gly Phe Thr Gly Asn  
178 325 330 335  
180 Phe Ser Thr Gln Lys Val Lys Met His Ile His Ser Thr Asn Glu Val  
181 340 345 350  
183 Thr Arg Ile Tyr Asn Val Ile Gly Thr Leu Arg Gly Ala Val Glu Pro  
184 355 360 365  
186 Asp Arg Tyr Val Ile Leu Gly Gly His Arg Asp Ser Trp Val Phe Gly  
187 370 375 380  
189 Gly Ile Asp Pro Gln Ser Gly Ala Ala Val Val His Glu Ile Val Arg  
190 385 390 395 400  
192 Ser Phe Gly Thr Leu Lys Glu Gly Trp Arg Pro Arg Arg Thr Ile  
193 405 410 415  
195 Leu Phe Ala Ser Trp Asp Ala Glu Glu Phe Gly Leu Leu Gly Ser Thr  
196 420 425 430  
198 Glu Trp Ala Glu Glu Asn Ser Arg Leu Leu Gln Glu Arg Gly Val Ala  
199 435 440 445  
201 Tyr Ile Asn Ala Asp Ser Ser Ile Glu Gly Asn Tyr Thr Leu Arg Val  
202 450 455 460  
204 Asp Cys Thr Pro Leu Met Tyr Ser Leu Val His Asn Leu Thr Lys Glu  
205 465 470 475 480  
207 Leu Lys Ser Pro Asp Glu Gly Phe Glu Gly Lys Ser Leu Tyr Glu Ser  
208 485 490 495  
210 Trp Thr Lys Lys Ser Pro Ser Pro Glu Phe Ser Gly Met Pro Arg Ile  
211 500 505 510  
213 Ser Lys Leu Gly Ser Gly Asn Asp Phe Glu Val Phe Phe Gln Arg Leu  
214 515 520 525  
216 Lys Ile Ala Ser Gly Arg Ala Arg Tyr Thr Lys Asn Trp Glu Thr Asn  
217 530 535 540  
219 Lys Phe Ser Gly Tyr Pro Leu Tyr His Ser Val Tyr Glu Thr Tyr Glu  
220 545 550 555 560  
222 Leu Val Glu Lys Phe Tyr Asp Pro Met Phe Lys Tyr His Leu Thr Val  
223 565 570 575  
225 Ala Gln Val Arg Gly Gly Met Val Phe Glu Leu Ala Asn Ser Ile Val  
226 580 585 590  
228 Leu Pro Phe Asp Cys Arg Asp Tyr Ala Val Val Leu Arg Lys Tyr Ala  
229 595 600 605  
231 Asp Lys Ile Tyr Ser Ile Ser Met Lys His Pro Gln Glu Met Lys Thr  
232 610 615 620  
234 Tyr Ser Val Ser Phe Asp Ser Leu Phe Ser Ala Val Lys Asn Phe Thr  
235 625 630 635 640  
237 Glu Ile Ala Ser Lys Phe Ser Glu Arg Leu Gln Asp Phe Asp Lys Ser  
238 645 650 655  
240 Asn Pro Ile Val Leu Arg Met Met Asn Asp Gln Leu Met Phe Leu Glu

RAW SEQUENCE LISTING  
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TIME: 13:26:03

Input Set : A:\41426-A-PCT-US.txt  
Output Set: N:\CRF3\07202001\H403803A.raw

```

241      660          665          670
243 Arg Ala Phe Ile Asp Pro Leu Gly Leu Pro Asp Arg Pro Phe Tyr Arg
244      675          680          685
246 His Val Ile Tyr Ala Pro Ser Ser His Asn Lys Tyr Ala Gly Glu Ser
247      690          695          700
249 Phe Pro Gly Ile Tyr Asp Ala Leu Phe Asp Ile Glu Ser Lys Val Asp
250 705      710          715          720
252 Pro Ser Lys Ala Trp Gly Glu Val Lys Arg Gln Ile Tyr Val Ala Ala
253      725          730          735
255 Phe Thr Val Gln Ala Ala Ala Glu Thr Leu Ser Glu Val Ala
256      740          745          750
258 <210> SEQ ID NO: 3
259 <211> LENGTH: 8
260 <212> TYPE: PRT
261 <213> ORGANISM: human
263 <400> SEQUENCE: 3
265 Ser Leu Tyr Glu Ser Trp Thr Lys
266 1      5
268 <210> SEQ ID NO: 4
269 <211> LENGTH: 15
270 <212> TYPE: PRT
271 <213> ORGANISM: human
273 <220> FEATURE:
--> 274 <221> NAME/KEY: misc.
275 <222> LOCATION: (1)..(15)
276 <223> OTHER INFORMATION: x=unknown
279 <400> SEQUENCE: 4
--> 281 Ser Tyr Pro Asp Gly Xaa Xaa Leu Pro Gly Gly Val Gln Arg
282 1      5          10          15
284 <210> SEQ ID NO: 5
285 <211> LENGTH: 7
286 <212> TYPE: PRT
287 <213> ORGANISM: human
289 <400> SEQUENCE: 5
291 Phe Tyr Asp Pro Met Phe Lys
292 1      5          10          11
294 <210> SEQ ID NO: 6
295 <211> LENGTH: 9
296 <212> TYPE: PRT
297 <213> ORGANISM: human
299 <400> SEQUENCE: 6
301 Ile Tyr Asn Val Ile Gly Thr Leu Lys
302 1      5
304 <210> SEQ ID NO: 7
305 <211> LENGTH: 22
306 <212> TYPE: PRT
307 <213> ORGANISM: human
309 <220> FEATURE:
--> 310 <221> NAME/KEY: misc

```

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/08/403,803A

DATE: 07/20/2001  
TIME: 13:26:03

Input Set : A:\41426-A-PCT-US.txt  
Output Set: N:\CRF3\07202001\H403803A.raw

311 <222> LOCATION: (1)..(22)  
 312 <223> OTHER INFORMATION: x=unknown  
 315 <400> SEQUENCE: 7  
 -> 317 Phe Leu Tyr Xaa Xaa Thr Gln Ile Pro His Leu Ala Gly Thr Glu Gln  
 318 1 5 10 15  
 320 Asn Phe Gln Leu Ala Lys  
 321 20  
 323 <210> SEQ ID NO: 8  
 324 <211> LENGTH: 17  
 325 <212> TYPE: PRT  
 326 <213> ORGANISM: human  
 328 <400> SEQUENCE: 8  
 330 Gly Val Ile Leu Tyr Ser Asp Pro Ala Asp Tyr Phe Ala Pro Asp Val  
 331 1 5 10 15  
 333 Lys  
 336 <210> SEQ ID NO: 9  
 337 <211> LENGTH: 17  
 338 <212> TYPE: PRT  
 339 <213> ORGANISM: human  
 341 <400> SEQUENCE: 9  
 343 Pro Val Ile Leu Tyr Ser Asp Pro Ala Asp Tyr Phe Ala Pro Gly Val  
 344 1 5 10 15  
 346 Lys  
 349 <210> SEQ ID NO: 10  
 350 <211> LENGTH: 15  
 351 <212> TYPE: PRT  
 352 <213> ORGANISM: human  
 354 <400> SEQUENCE: 10  
 356 Ala Phe Ile Asp Pro Leu Gly Leu Pro Asp Arg Pro Phe Tyr Arg  
 357 1 5 10 15  
 359 <210> SEQ ID NO: 11  
 360 <211> LENGTH: 19  
 361 <212> TYPE: PRT  
 362 <213> ORGANISM: human  
 364 <400> SEQUENCE: 11  
 366 Tyr Ala Gly Glu Ser Phe Pro Gly Ile Tyr Asp Ala Leu Phe Asp Ile  
 367 1 5 10 15  
 369 Glu Ser Lys  
 372 <210> SEQ ID NO: 12  
 373 <211> LENGTH: 22  
 374 <212> TYPE: PRT  
 375 <213> ORGANISM: human  
 377 <220> FEATURE:  
 --> 378 <221> NAME/KEY: misc.  
 379 <222> LOCATION: (1)..(22)  
 380 <223> OTHER INFORMATION: x=unknown  
 383 <400> SEQUENCE: 12  
 --> 385 Thr Ile Leu Phe Ala Ser Trp Asp Ala Glu Glu Phe Gly Xaa Xaa Gly  
 386 1 5 10 15  
 FYI,

Use of 'n' and/or 'Xaa' has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using 'n' or 'Xaa'.

Add 1

<210> 13

<211> 17

<212> DNA

<213> artificial;primer

<220>

<221> misc.

<222> (1)..(16)

<223> n=unknown

<400> 13

ttytaygayc cnatgtt

17

sec item # 10 on  
ERROR summary

SHEET



The type of errors shown exist throughout  
the Sequence Listing. Please check subsequent  
sequences for similar errors.

<210> 14

<211> 17

<212> DNA

<213> artificial;primer

<220>

<221> misc

<222> (1)..(16)

<223> n=unknown

<400> 14

aacatnggrt crtaraa

17

<210> 15

<211> 17

<212> DNA

<213> artificial;primer

<220>

<221> misc.

Add 2

<210> 30

<211> 27

<212> DNA

<213> artificial

see item # 11 on ERROR  
SUMMARY SHEET.

<400> 30

acggagcaaa actttcagct tgcaaag

27

VERIFICATION SUMMARY DATE: 07/20/2001  
 PATENT APPLICATION: US/08/403,803A TIME: 13:26:04

Input Set : A:\41426-A-PCT-US.txt  
 Output Set: N:\CRF3\07202001\H403803A.raw

9 M:270 C: Current Application Number differs, Replaced Current Application No  
 9 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
 274 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4  
 281 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 310 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7  
 317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
 378 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12  
 385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
 394 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13  
 397 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13  
 403 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
 409 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14  
 412 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14  
 418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
 424 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15  
 427 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15  
 433 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
 439 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16  
 442 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16  
 448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
 454 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:17  
 457 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17  
 463 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
 469 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:18  
 472 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18  
 478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
 484 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:19  
 487 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19  
 493 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
 499 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:20  
 502 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20  
 508 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20  
 514 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:21  
 516 M:258 W: Mandatory Feature missing, <220> FEATURE:  
 516 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
 523 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:22  
 525 M:258 W: Mandatory Feature missing, <220> FEATURE:  
 525 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
 532 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:23  
 535 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23  
 541 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
 547 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:24  
 550 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:24  
 556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
 562 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:25  
 565 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:25  
 571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
 577 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:26

VERIFICATION SUMMARY  
PATENT APPLICATION: US/08/403,803A

DATE: 07/20/2001  
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Input Set : A:\41426-A-PCT-US.txt  
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580 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:26  
586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
595 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:27  
603 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
609 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
625 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
634 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:28  
646 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
652 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
654 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
656 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
658 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
669 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:29  
681 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
687 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
697 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:30  
699 M:258 W: Mandatory Feature missing, <220> FEATURE:  
699 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
706 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:31  
708 M:258 W: Mandatory Feature missing, <220> FEATURE:  
708 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
716 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:32  
718 M:258 W: Mandatory Feature missing, <220> FEATURE:  
718 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
725 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:33  
727 M:258 W: Mandatory Feature missing, <220> FEATURE:  
727 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
734 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:34  
736 M:258 W: Mandatory Feature missing, <220> FEATURE:  
736 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

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SEP 1 1 2001

Raw Sequence Listing Error Summary

TECH CENTER 1600/2900

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 08/403,803A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1  Wrapped Nucleic  
   Wrapped Aminos      The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2  Invalid Line Length      The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
- 3  Misaligned Amino  
  Numbering      The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4  Non-ASCII      The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5  Variable Length      Sequence(s) \_\_\_\_\_ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6  PatentIn 2.0  
  "bug"      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) \_\_\_\_\_. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7  Skipped Sequences  
(OLD RULES)      Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8  Skipped Sequences  
(NEW RULES)      Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9  Use of n's or Xaa's  
(NEW RULES)      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10  Invalid <213>  
Response      Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11  Use of <220>  
30      Sequence(s) 30 missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12  PatentIn 2.0  
  "bug"      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

**Attachment for PTO-948 (Rev. 03/01, or earlier)**

6/16/01

**The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.**

**INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

**1. Correction of Informalities -- 37 CFR 1.85**

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

**2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.**

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

**Timing of Corrections**

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.